

AMENDMENTS TO THE CLAIMS:

1. (Previously Presented) A remote terminal in a communication system, comprising:
 - a first receiver operative to receive, process, and digitize a received signal to provide samples;
 - a rake receiver coupled to the first receiver and operative to receive and process the samples to provide time measurements indicative of times of arrival of transmissions received at the remote terminal from a plurality of base stations; and
 - a reference oscillator configured to generate a clock signal used by the rake receiver, wherein the rake receiver includes a plurality of finger processors, wherein a first set of one or more finger processors is assigned to a first set of one or more base stations in active communication with the remote terminal, wherein a second set of one or more finger processors is assigned to a second set of one or more base stations not in active communication with the remote terminal, wherein finger processors assigned to base stations in the first and second sets are operative to perform the time measurements on the transmissions received from the base stations, and wherein the finger processors perform the time measurements within a time period between updates of the reference oscillator.
2. (Original) The remote terminal of claim 1, wherein the time measurements are performed at approximately the same instance in time.
3. (Original) The remote terminal of claim 1, wherein the time measurement for each base station is based on an earliest arriving multipath received for the base station.
4. (Original) The remote terminal of claim 1, wherein the time measurements for the base stations are based on transmissions on a particular channel.
5. (Original) A remote terminal in a communication system, comprising:
 - a first receiver operative to receive, process, and digitize a modulated signal to provide samples; and

a rake receiver coupled to the first receiver and operative to receive and process the samples to provide time measurements indicative of times of arrival of transmissions received at the remote terminal from a plurality of base stations, wherein the rake receiver includes:

a plurality of finger processors, wherein one or more finger processors are assigned to each base station in a first set, and

a searcher element operative to process one or more transmissions from one or more base stations in a second set, and

wherein the finger processors and searcher element are each operative to perform a time measurement for a respective base station in the first or second set, and wherein time measurements for base stations in the first and second sets are performed between updates of a control signal for a reference clock used to perform the time measurements.

6. (Original) The remote terminal of claim 5, wherein time measurements for the one or more base stations in the second set are performed sequentially.

7. (Original) The remote terminal of claim 5, wherein base stations in the second set are not in active communication with the remote terminal.

8. (Original) The remote terminal of claim 5, wherein the time measurements for the base stations in the second set are based on pilot references transmitted by the base stations.

9. (Previously Presented) The remote terminal of claim 5, wherein the updates of the control signal occur at a period of approximately 200 msec.

10. (Previously Presented) The remote terminal of claim 5, wherein the time measurements are performed after a predetermined delay time period following an update of the control signal.

11. (Previously Presented) The remote terminal of claim 5, wherein the reference clock comprises a voltage controlled crystal oscillator.

12. (Previously Presented) The remote terminal of claim 5, wherein the time measurements correspond to SFN-SFN measurements for the base stations in the first and second sets in accordance with W-CDMA standard.

13. (Previously Presented) The remote terminal of claim 5, wherein the time measurement for each base station is based on an earliest arriving multipath received for the base station.

14. (Previously Presented) The remote terminal of claim 5, wherein the time measurements for the base stations in the first and second sets are based on pilot references transmitted by the base stations.

15. (Previously Presented) The remote terminal of claim 5, wherein the time measurements for the base stations in the first and second sets are based on transmissions on a particular channel.

16. (New) A remote terminal in a communication system, comprising:
means for receiving, processing, and digitizing a received signal to provide samples;
means for receiving and processing the samples to provide time measurements indicative of times of arrival of transmissions received at the remote terminal from a plurality of base stations; and

means for generating a clock signal used by the means for receiving and processing the samples,

wherein the means for receiving and processing the samples includes a plurality of means for finger processing, wherein a first set of one or more means for finger processing is assigned to a first set of one or more base stations in active communication with the remote terminal,

wherein a second set of one or more means for finger processing is assigned to a second set of one or more base stations not in active communication with the remote terminal,

wherein means for finger processing assigned to base stations in the first and second sets are operative to perform the time measurements on the transmissions received from the base stations, and

wherein the means for finger processing perform the time measurements within a time period between updates of the means for generating the clock signal.

17. (New) A remote terminal in a communication system, comprising:
- a first means for receiving operative to receive, process, and digitize a modulated signal to provide samples; and
 - a second means for receiving coupled to the first means for receiving and operative to receive and process the samples to provide time measurements indicative of times of arrival of transmissions received at the remote terminal from a plurality of base stations, wherein the second means for receiving includes:
 - a plurality of means for finger processing, wherein one or more means for finger processing are assigned to each base station in a first set, and
 - a means for searching operative to process one or more transmissions from one or more base stations in a second set, and
 - wherein the means for finger processing and means for searching are each operative to perform a time measurement for a respective base station in the first or second set, and wherein time measurements for base stations in the first and second sets are performed between updates of a control signal for a reference clock used to perform the time measurements.
18. (New) A remote terminal in a communication system, comprising:
- means for identifying a first set of one or more base stations in active communication with the remote terminal;
 - means for assigning at least one finger processor of a rake receiver to each base station in the first set;
 - means for identifying a second set of one or more base stations not in active communication with the remote terminal;
 - means for assigning an available finger processor to at least one base station in the second set;
 - means for performing a time measurement for each base station assigned with at least one finger processor, wherein a multipath for the base station is processed to obtain samples, the samples are processed to determine a start of a radio frame for a particular transmission, and the time measurement is indicative of the start of the radio frame; and
 - means for providing outputs indicative of time measurements obtained for based stations assigned with finger processors.

19. (New) A remote terminal in a communication system, comprising:

- means for identifying a first set of one or more base stations in active communication with the remote terminal;
- means for assigning at least one finger processor of a rake receiver to each base station in the first set;
- means for performing a time measurement for each base station in the first set;
- means for identifying a second set of one or more base stations not in active communication with the remote terminal;
- means for performing a time measurement for each base station in the second set,
- wherein time measurements for base stations in the first and second sets are performed between updates of a control signal for a reference clock used to perform the time measurements, and
- wherein at least one of the means for performing the time measurement for each base station in the first set or means for performing the time measurement for each base station in the second set includes:
 - means for processing a multipath for the base station to obtain samples, and
 - means for processing the samples to determine a start of a radio frame for a particular transmission, and wherein the time measurement is indicative of the start of the radio frame.

20. (New) A computer readable medium containing executable computer program instructions which, when executed by a processor, cause said processor to perform a method for determining a position of a remote terminal in a communication system, the method comprising:

- identifying a first set of one or more base stations in active communication with the remote terminal;
- assigning at least one finger processor of a rack receiver to each base station in the first set;
- identifying a second set of one or more base stations not in active communication with the remote terminal;
- assigning an available finger processor to at least one base station in the second set;

performing a time measurement for each base station assigned with at least one finger processor; wherein the performing includes

processing a multipath for the base station to obtain samples, and

processing the samples to determine a start of radio frame for a particular transmission, and wherein the time measurement is indicative of the start of the radio frame, and

providing outputs indicative of time measurements obtained for base stations assigned with finger processors.

21. (New) A processor readable medium containing executable computer program instructions which, when executed by a processor, cause said processor to perform a method for determining a position of a remote terminal in a communication system, the method comprising:

identifying a first set of one or more base stations in active communication with the remote terminal;

assigning at least one finger processor of a rack receiver to each base station in the first set;

performing a time measurement for each base station in the first set using an assigned finger processor;

identifying a second set of one or more base stations not in active communication with the remote terminal; and

performing a time measurement for each base station in the second set using one or more processing elements, and

wherein time measurements for base stations in the first and second sets are performed between updates of a control signal for a reference clock used to perform the time measurements, and wherein at least one of the performing includes:

processing a multipath for the base station to obtain samples, and

processing the samples to determine a start of a radio frame for a particular transmission, and wherein the time measurements is indicative of the start of the radio frame.